What is claimed is:

1. A portable helipad, comprising

a deck having a top surface, an underside surface, and

a peripheral margin;

a plurality of legs depending from the deck for supporting the deck, the plurality of legs comprising at

least one extensible leq;

and a plurality of leg braces, at least one leg brace extending from each one of the plurality of legs to an attachment means within an associated zone of attachment on the underside surface of the deck, said zone being defined for each such leg by the region that lies between the top of such leg and a boundary that is substantially equidistant from the top of that leg and the top of the nearest other leg, said zone not extending beyond the boundary of equidistance between that leg and the nearest other leg.

- 2. A portable helipad as defined in daim 1, wherein at least one of the leg braces is in compression under load, in order that a lesser amount of material may be used to construct the deck while maintaining a preselected minimum deck load bearing capacity.
- 3. The portable helipad of claim 1, wherein all of the leg braces are in compression under load, in order that a lesser amount of material may be used to construct the deck while maintaining a preselected minimum deck load bearing capacity.
- 4. The portable helipad of claim 1, wherein the overall portable helipad structure is sufficiently light to be carried in an assembled state by a helicopter of a size suitable for landing on the portable helipad.
- 5. The portable helipad of claim 2, wherein the overall portable helipad structure is sufficiently light to be carried in an

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assembled state by a helicopter of a size suitable for landing on the portable helipad.

- 6. The portable helipad of claim 3, wherein the overall portable helipad structure is sufficiently light to be carried in an assembled state by a helicopter of a size suitable for landing on the portable helipad.
- 7. The portable helipad of claim 2, wherein the shear stress on each leg due to the corresponding leg brace load is less than a preselected maximum.
- 8. The portable helipad of claim 3, wherein the shear stress on each leg due to the corresponding leg brace load is less than a preselected maximum.

The portable helipad of claim 1, wherein each extensible leg comprises an upper segment secured to the deck, and a lower extensible segment longitudinally adjustable relative to the upper segment, and wherein at least one of the plurality of leg braces is extensible, each said extensible leg brace extending from the lower extensible segment of an extensible leg to its associated attachment means.

- The portable helipad of claim a, wherein the lower extensible segment of each extensible leg is replaceably removable from the upper segment, such that it may be interchanged with a lower extensible segment of different length, and wherein any leg braces extending from the lower extensible segment of each extensible leg are replaceably removable from their respective associated attachment means.
- 11. The portable helipad of claim 1, wherein the legs and leg braces are releasably secured to the deck by pin means, in order that the portable helipad may be rapidly assembled and disassembled without the use of tools.

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12. The portable helipad of claim 9, wherein the extensible legs and extensible leg braces are adjustable by pin means, in order that the portable helipad may rapidly be adjusted to suit the terrain upon which it is set without the use of tools.

The portable helipad of claim 10, wherein the extensible legs and extensible leg braces are adjustable by pin means, in order that the portable helipad may rapidly be adjusted to suit the terrain upon which it is set without the use of tools.

- 14. The portable helipad of claim in, wherein the extensible legs and extensible leg braces are adjustable by pin means, in order that the portable helipad may rapidly be adjusted to suit the terrain upon which it is set without the use of tools.
- 15. A portable helipad as defined in claim 1, wherein at least one of the legs is shorter than at least one of the remaining legs comprising the plurality of legs, in order that the helipad may be used on a slope.
- 16. A portable helipad as defined in claim 1, wherein the legs depend substantially vertically downward from the deck, and at least one leg is adjustable in order to maintain the deck in a substantially horizontal plane.
- 17. A portable helipad as defined in claim 1, wherein the deck is permeable to precipitation and wind.
- 18. The portable helipad of claim 17, in which the deck is constructed of an open weave material for substantial reduction of snow and wind loading.
- 19. The portable helipad of claim 17, additionally comprising removable helicopter restrains means extending through the top

surface of the deck and removably affixed to an associated point of attachment on the underside surface of the deck in order to prevent a helicopter resting upon the portable helipad from sliding off of the portable helipad in strong winds.

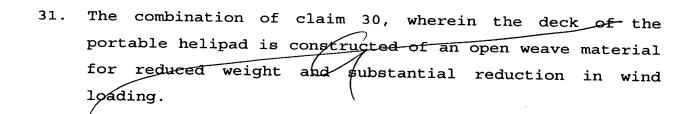
- 20. The portable helipad of claim 18, additionally comprising removable helicopter restraint means extending through the top surface of the deck and removably affixed to an associated point of attachment on the underside surface of the deck in order to prevent a helicopter resting upon the portable helipad from sliding off of the portable helipad in strong winds.
- 21. The portable helipad of claim 1 additionally comprising removable ground engagement and anothering means secured at the distal end of at least one leg.
- 22. The portable helipad of claim 21, wherein the removable ground engagement and anchoring means comprise platforms suitable for anchorage to the ground and stumps by spiking.
- 23. The portable helipad of claim 1, wherein the legs are secured to the deck at positions that are inset from the peripheral margin of the deck.
- 24. The portable helipad of claim 11, wherein the legs are secured to the deck at positions that are inset from the peripheral margin of the deck.
- 25. The portable helipad of claim 1, wherein the associated attachment means for each leg brace is located substantially at the peripheral margin of the deck at the boundary equidistant between the leg to which such leg brace is attached and the nearest other leg.
- 26. The portable helppad of claim 11, wherein the associated

attachment means for each leg brace is located substantially at the peripheral margin of the deck at the boundary equidistant between the leg to which such leg brace is attached and the nearest other leg.

- 27. The portable helipad of claim 1, wherein the associated attachment means for all leg braces is located substantially at the center of the undersige surface of the deck.
- 28. The portable helipad of claim 11, wherein the associated attachment means for all leg braces is located substantially at the center of the underside surface of the deck.
- 29. A portable helipad as defined in claim 1, comprising at least three legs and associated leg braces.
- 30. The combination of a helicopter and a portable helipad removably transportable in a fully assembled state by said helicopter, said portable helipad comprising
 - a deck;
 - a plurality of legs depending from the deck for supporting the deck; the plurality of legs comprising at least one extensible leg;
 - a plurality of leg braces, at least one leg brace extending from each one of the plurality of legs to an attachment means within an associated zone of attachment on the underside surface of the deck defined by the region that lies between the leg and a boundary that is substantially equidistant from that leg and any other leg, but not beyond the boundary of equidistance between that leg and any other leg;

deck engagement means attached to the underside of the helicopter for releasably attaching the portable helipad in transport position; and,

helicopter engagement means complementing the deck engagement means for releasably attaching the deck to the underside of the helicopter.



Date

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